

We claim:

1. A method of treating tertiary butyl alcohol containing a minor amount of impurities which comprises contacting the tertiary butyl alcohol in the liquid phase with aluminum oxide and a large pore zeolite, and recovering a tertiary butyl alcohol product stream reduced in content of the impurities.
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2. The method of claim 1 wherein the large pore zeolite has an average pore size from about 6 Angstroms to about 15 Angstroms
3. The method of claim 1 wherein the large pore zeolite is zeolite X.
4. The method of claim 1 wherein the large pore zeolite is zeolite Y.
- 10 5. The method of claim 1 wherein the large pore zeolite is in the sodium form.
6. The method of claim 1 wherein the aluminum oxide is selected from the group consisting of α -alumina, γ -alumina, activated alumina, and basic alumina.
- 15 7. The method of claim 6 wherein the aluminum oxide is activated alumina.
8. The method of claim 1 wherein the aluminum oxide has a surface area in the range of from about 50 to about 500 m²/g.
9. The method of claim 1 wherein the tertiary butyl alcohol is
20 contacted with an additional adsorbent comprising a molecular sieve having an average pore size of about 3 to about 5 Angstroms.
10. The method of claim 9 wherein the molecular sieve is selected from the group consisting of 3A, 4A, and 5A.
11. The method of claim 9 wherein the molecular sieve is 4A.
- 25 12. A method of treating tertiary butyl alcohol containing impurities which comprises contacting the tertiary butyl alcohol with activated alumina, a large pore zeolite selected from the group consisting of zeolite Y and zeolite X, and a molecular sieve selected from the group consisting of 3A, 4A, and 5A, and recovering a tertiary butyl alcohol product stream reduced in content of the
30 impurities.
13. The method of claim 12 wherein the large pore zeolite is in the sodium form.
14. The method of claim 12 wherein the molecular sieve is 4A.